



The brand new IDS-1000B Series digital storage oscilloscopes equip with 100MHz, 70MHz and 50MHz bandwidth, 2 or 4 analog input channels (50MHz, 4 channels input only) that provide entry level users with diversified selections. The maximum real time sampling rate can be up to 1GSa/s. The robust functional performance makes the economical oscilloscope more colorful and allows entry level users to sumptuously enjoy the fun and value brought by test and measurement which is precisely the emerging mission of the test and measurement industry that GW Instek works relentlessly to achieve.

10M memory depth for each channel yields exquisite measurement results and allows each retrieved waveform to successfully reveal the details of signal. Engineers are often baffled by failing to retrieve signal details when measuring basic electric circuit signals. Now, IDS-1000B series oscilloscopes, with 10M memory depth for each channel, are capable to uncover all signal details.

7" 800 x 480 WVGA LCD display and the 256 color gradient display function together allow the IDS-1000B Series to distinctly display waveform details in gradients while measuring fast changing analog signals. Additionally, 50,000wfms/s waveform update rate helps engineers clearly understand the gradients of signal variations and easily identify the problem of transient signal variations.

1Mpts FFT signal display makes the frequency domain display function more delicate. Engineers can clearly observe the distributed details of frequency domain signals. Smooth and rapid response can even better locate where the problems are originated. Powerful FFT function realizes high efficient spectrum analysis measurement which is indispensable for technology and education arenas.

The IDS-1000B Series oscilloscopes provide the zero key function for vertical voltage scale adjustment, horizontal time scale adjustment and trigger level adjustment. When processing complicate waveform adjustment and observation, engineers often require the zero key function to start a new measurement, adjust waveform or reset trigger level. The zero key function can reduce time in turning control knobs that is a great benefit for engineers.

IDS-1000B Series

FEATURES

- 100/70/50MHz Bandwidth Selections, 4ch Input
- 1GSa/s Maximum Sampling Rate
- 10M Maximum Memory Depth For Each Channel
- 7" 800 x 480 WVGA LCD Display
- 256 Color Gradient Display Function to Strengthen Waveform Performance
- 1Mpts FFT Frequency Domain Signal Display
- Zero Key Function For Horizontal Time, Vertical Voltage and Triggering
- Compact And Innovative Exterior Design



Rear Panel

APPLICATIONS

- Educational Market - General Purpose Instruction
- Industrial Sector - Fundamental R&D Measurement Applications

SPECIFICATIONS

		IDS-1054B	IDS-1072B	IDS-1074B	IDS-1102B	IDS-1104B
VERTICAL	Channels	4	2 + Ext	4	2 + Ext	4
	Bandwidth	DC~50MHz(-3dB)	DC~70MHz(-3dB)	DC~70MHz(-3dB)	DC~100MHz(-3dB)	DC~100MHz(-3dB)
TRIGGER	Rise Time	7ns	5ns	5ns	3.5ns	3.5ns
	Bandwidth Limit	20MHz	20MHz	20MHz	20MHz	20MHz
	Vertical Sensitivity Resolution	8 bit : 1mV~10V/div				
	Input Coupling	AC, DC, GND				
	Input Impedance	1M Ω // 16pF approx.				
	DC Gain Accuracy*	\pm 3%				
	Polarity	Normal & Invert				
	Maximum Input Voltage	300Vrms, CAT I (300Vrms CAT II with GTP-101A-2 10:1 probe)				
	Offset Position Range	1mV/div : \pm 1.25V ; 2mV/div ~ 100mV/div : \pm 2.5V ; 200mV/div ~ 10V/div : \pm 125V				
	Waveform Signal Process	+, -, x, \div , FFT, FFTrms, User Defined Expression ; FFT: Spectral magnitude. Set FFT Vertical Scale to Linear RMS or dBV RMS ; FFT Window Display : Rectangular, Hamming, Handing, or Blackman-Harris				
EXTERNAL TRIGGER	Source	CH1, CH2, CH3*, CH4*, Line, EXT** ; *four channel models only ; **two channel models only				
	Trigger Mode	Auto (supports Roll Mode for 100 ms/div and slower), Normal, Single Sequence				
HORIZONTAL	Trigger Type	Edge, Pulse Width, Video, Pulse Runt, Rise & Fall, Timeout, Alternate, Event-Delay(1~65535 events), Time-Delay (Duration, 4ns~10S), Bus				
	Holdoff range	4ns to 10s				
	Coupling	AC, DC, LF rej., Hf rej., Noise rej.				
X-Y MODE	Sensitivity	1div				
	Input Impedance	\pm 15V				
CURSORS AND MEASUREMENT	Range	DC ~ 100MHz Approx. 100mV ; 100MHz ~ 200MHz Approx. 150mV				
	Sensitivity	1M Ω \pm 3%~16pF				
	Input Impedance	5ns/div ~ 100s/div (1-2-5 increments)				
	Time base Range	100ms/div ~ 100s/div				
	ROLL	10 div maximum				
	Pre-trigger	2,000,000 div maximum				
	Post-trigger	\pm 50 ppm over any \geq 1 ms time interval				
	Timebase Accuracy	1GSa/s max.				
	Real Time Sample Rate	Max. 10Mpts				
	Record Length	Normal, Average, Peak Detect, Single				
CONTROL PANEL FUNCTION	Acquisition Mode	2nS (typical)				
	Peak Detection	selectable from 2 to 256				
DISPLAY	Average	Channel 1; Channel 3*(*four channel models only)				
	X-Axis Input	Channel 2; Channel 4*(*four channel models only)				
POWER SOURCE	Y-Axis Input	\pm 3 $^\circ$ at 100kHz				
	Phase Shift	Amplitude, Time, Gating available; Unit : Seconds(s), Hz(1/s), Phase(degree), Ration(%)				
MISCELLANEOUS	Cursors	36 sets: Pk-Pk, Max, Min, Amplitude, High, Low, Mean, Cycle Mean, RMS, Cycle RMS, Area, Cycle Area, ROVShoot, FOVShoot, RPRESHoot, FPRESHoot, Frequency, Period, RiseTime, FallTime, +Width, -Width, Duty Cycle, +Pulses, -Pulses, +Edges, -Edges, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF, Phase				
	Automatic Measurement	Voltage difference between cursors (Δ V) Time ; difference between cursors (Δ T) 6 digits, range from 2Hz minimum to the rated bandwidth				
DIMENSIONS & WEIGHT	Cursors Measurement	Single-button, automatic setup of all channels for vertical, horizontal and trigger systems, with undo Autoset				
	Auto Counter	Autoset Save Setup Save Waveform				
ACCESSORIES	Autoset	20set				
	Save Setup	24set				
OPTIONAL ASSESSORIES	Save Waveform	7" TFT WVGA color display				
	Multi-Language Menu	800 horizontal x 480 vertical pixels (WVGA)				
OPERATION ENVIRONMENT	Operation Environment	800 horizontal x 480 vertical pixels (WVGA)				
	Online Help	Sin(x)/x				
DRIVER	Software	Dots, vectors, variable persistence (16ms~4s), infinite persistence				
	Driver	50,000 waveforms per second, maximum				
DRIVER	Software	8 x 10 divisions				
	Driver	YT, XY				
DRIVER	Software	USB 2.0 High-speed host port x1, USB High-speed 2.0 device port x1				
	Driver	RJ-45 connector, 10/100Mbps with HP Auto-MDIX (Only for the GDS-1074B, GDS-1104B.)				
DRIVER	Software	5V Max/10mA TTL open collector output				
	Driver	Rear-panel security slot connects to standard kensington-style lock				
DRIVER	Software	AC 100V ~ 240V , 50Hz ~ 60Hz , Auto selection , Power consumption: 30 Watts				
	Driver	Available				
DRIVER	Software	Available				
	Driver	Temperature : 0 $^\circ$ C ~ 50 $^\circ$ C. Relative Humidity \leq 80% at 40 $^\circ$ C or below, \leq 45% at 41 $^\circ$ C ~ 50 $^\circ$ C				
DRIVER	Software	Available				
	Driver	Available				
DRIVER	Software	380(W) x 208 (H) x 127.3(D)mm, Approx. 2.8kg				
	Driver	380(W) x 208 (H) x 127.3(D)mm, Approx. 2.8kg				

The specifications apply when the GDS-1000B is powered on for at least 30 minutes under +20 $^\circ$ C~+30 $^\circ$ C.

Specifications subject to change without notice.

ORDERING INFORMATION

IDS-1104B	100MHz, 4 channels, Digital Storage Oscilloscope
IDS-1102B	100MHz, 2 channels, Digital Storage Oscilloscope
IDS-1074B	70MHz, 4 channels, Digital Storage Oscilloscope
IDS-1072B	70MHz, 2 channels, Digital Storage Oscilloscope
IDS-1054B	50MHz, 4 channels, Digital Storage Oscilloscope

ACCESSORIES

User manual x1, Power cord x1
GTP-101A-2 100MHz Passive Probe, 10:1, Suitable for IDS-1000B full series.

OPTIONAL ASSESSORIES

GDB-03	Demo Board
GTL-110	Test lead, BNC to BNC heads
GTL-246	USB cable, USB 2.0 A-B type cable 4P, 1200mm

FREE DOWNLOAD

Software	OpenWave Software
Driver	USB Driver ; LabView Driver

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